UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Washington, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Antimicrobial Division

June 30, 2016

DP BARCODE: 432640

MRID(s): 497762-02

SUBJECT: Bioguard MSA Algicide

REG. NO. OR FILE SYMBOL: 5185-382

DOCUMENT TYPE: Acute Toxicity Review

Manufacturing-use [ ] OR **End-use Product [X]**

INGREDIENTS:

PC Code(s)	CAS Number(s)	Active Ingredient(s):
024403	82027-59-6	Copper Triethanolamine Complex
069105	68424-85-1	n-Alkyl dimethyl ethylbenzyl ammonium chloride (C14 50%, C12 40%, C16 10%)

TEST LAB: Product Safety Lab

SUBMITTER: Bio-Lab, Inc

GUIDELINE(s): 870.1300

COMMODITIES: N/A

REVIEWER: Boris S. Yurchak **ORGANIZATION:** AD/PSB/CTT

APPROVER: Karen P. Hicks **APPROVED DATE:** 7/ /2016

COMMENT: This product is for non-food use

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MEMORANDUM

SUBJECT: Acute Toxicity Review for EPA Reg. No. 5185-382
Product Name: Bioguard MSA Algicide
DP Barcode: 432640

TO: Rose Kyprianou / Timothy Young
Regulatory Management Branch II
Antimicrobials Division (7510P)

FROM: Boris S. Yurchak, Chemist
Product Science Branch, CT Team
Antimicrobials Division (7510P)

THRU: Karen P. Hicks, CT Team Leader
Product Science Branch
Antimicrobials Division (7510P)

APPLICANT: Bio-Lab, Inc
Action code: (A676) Product Reregistration Decision
Due out date: July 1, 2016

PRODUCT FORMULATION FROM LABEL:

Active Ingredient(s):	% by wt.
Copper Triethanolamine Complex	23.6
n-Alkyl dimethyl ethylbenzyl ammonium chloride (C14 50%, C12 40%, C16 10%)	2.5
Other Ingredient(s)	73.9
TOTAL	100.0

BACKGROUND:

The registrant is submitting the acute inhalation study (81-3) in MRID 497762-02 to support the reregistration of the subject product, Bioguard MSA Algicide, EPA Reg. No. **5185-382**. The study was conducted by Product Safety Labs. The test material used in the studies was the subject product. The product is used for controlling algae in swimming pools.

The data package included:

1. Basic Confidential Statements of Formula (CSF), dated 03/08/2010.
2. Accepted label, dated 06/27/2016.

FINDINGS:

1. The acute inhalation study (81-3) is acceptable.
2. The acute toxicity profile for EPA Reg. No. **5185-382** is currently:

GRN	Study	MRID	Toxicity Category	Status
81-1	Acute Oral Toxicity	No data		Data gap
81-2	Acute Dermal Toxicity	No data		Data gap
81-3	Acute Inhalation Toxicity	49776202	II	Acceptable
81-4	Primary Eye Irritation	No data		Data gap
81-5	Primary Dermal Irritation	No data		Data gap
81-6	Dermal Sensitization	No data		Data gap

CONCLUSION:

The acute inhalation toxicity requirements have been satisfied for the subject product EPA Reg. No. 5185-382.

The precaution label statement might be composed after reviewing of data pertained to all endpoints of product toxicity.

DATA REVIEW FOR ACUTE INHALATION TOXICITY TESTING (OCSPP 870.1300)

Product Manager: J. Chao / 33

Reviewer: B. Yurchak
Study Completion Date: 11/17/2015

MRID No.: 49776202
Report No.: 41772

Testing Laboratory: Product Safety Labs
Author: Jennifer Durando, BS

Quality Assurance (40 CFR §160): Included

Test Material: BioGuard MSA Algicide II
Concentration: Gravimetric – 0.062 mg/L
Nominal – 2.748 mg/L
Chamber Type: Nose-only

Species: Rat, Sprague-Dawley
Sex: 5 Males and 5 Females
Age: 9-10 weeks
Weight: Males 295-322 g, Females 192-224 g
Source: SAGE Labs

Summary:

1. **Estimated LC_{50}**: > 0.062 mg/L
2. **Average MMAD**: 2.21 µm; **Average GSD:** 2.41
3. **Toxicity Category**: II
4. **Classification**: Acceptable

Deviations from Guideline 870.1300 and other comments: None

Results:

Male and female rats were exposed nose-only to the test atmosphere for 4 hours at 0.062 mg/L. All animals survived exposure to the test substance and gained body weight during the study. Clinical abnormalities observed irregular respiration. All animals recovered by Day 2 and appeared active and healthy for the duration of the study. No gross abnormalities were noted for any of the animals when necropsied at the conclusion of the 14-day observation period. The median lethal was estimated to be > 0.062 mg/L in male and female rats.

Reported Mortality

Exposure Concentration (mg/L)	Number of deaths / number tested		
	Males	Females	Combined
0.062	0 / 5	0 / 5	0 / 10

Chamber Atmosphere

Exposure Concentration (mg/L)	Mean MMAD (µm)	Mean GSD
0.062	2.21	2.41

Chamber Environment

Exposure Level (mg/L)	0.062
Chamber Volume (L)	28
Total Airflow Rate (Lpm)	25
Temperature (°C)	20-21
Relative Humidity (%)	40-42